67,010-031
H2597-PP
HSC010726

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (ORIGINAL) A propeller control system comprising:

a propeller shaft which rotates about an axis of rotation to drive a plurality of propeller blades extending therefrom;

a translating pitch change yoke portion mounted within said propeller shaft along said axis of rotation; and

an articulatable pitch change yoke portion pivotally mounted to said translating pitch change yoke portion for axial movement therewith, said translating pitch change yoke portion axially movable along said axis of rotation to collectively change a pitch of said plurality of propeller blades, said articulatable pitch change yoke portion deflectable off said axis of rotation to cyclically change the pitch of said plurality of propeller blades.

2. (ORIGINAL) The propeller control system as recited in claim 1, further comprising an elastomeric bearing between said translating pitch change yoke portion and said articulatable pitch change yoke portion.

3. (ORIGINAL) The propeller control system as recited in claim 1, further comprising a link mounted to said articulatable pitch change yoke portion and each of said plurality of propeller blades.

4. (ORIGINAL) The propeller control system as recited in claim 1, further comprising a link mounted to said articulatable pitch change yoke portion and each of said plurality of propeller blades, each of said links mounted to said articulatable pitch change yoke portion adjacent an elastomeric bearing mounted between said translating pitch change yoke portion and said articulatable pitch change yoke portion.



PAGE 2/8 * RCVD AT 4/7/2005 1:52:18 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/1 * DNIS:8729306 * CSID:12489888363 * DURATION (mm-ss):02-22

5. (ORIGINAL) The propeller control system as recited in claim 1, wherein said translating pitch change yoke portion and said articulatable pitch change yoke portion are mounted to a pitch change actuating piston located between a coarse pitch actuator chamber and a fine pitch actuator chamber.

6. (ORIGINAL) The propeller control system as recited in claim 1, further comprising a coupling mounted about said articulatable pitch change yoke portion, said articulatable pitch change yoke portion rotatable and translatable within said coupling.

7. (ORIGINAL) The propeller control system as recited in claim 6, further comprising a pitch change actuator mounted to said coupling to deflect said articulatable pitch change yoke portion from said axis of rotation.

8. (ORIGINAL) The propeller control system as recited in claim 6, further comprising a first pitch change actuator mounted to said coupling to deflect said articulatable pitch change yoke portion from said axis of rotation in a first direction and a second pitch change actuator mounted to said coupling to deflect said articulatable pitch change yoke portion from said axis of rotation in a second direction.

9. (ORIGINAL) The propeller control system as recited in claim 8, wherein said first pitch change actuator and said second pitch change actuator are pivotally mounted.

10. (ORIGINAL) The propeller control system as recited in claim 8, further comprising a cyclic pitch controller in communication with said first pitch change actuator and said second pitch change actuator.

11. (ORIGINAL) The propeller control system as recited in claim 10, wherein said cyclic pitch controller communicates with an aircraft flight control system.



PAGE 3/8 * RCVD AT 4/7/2005 1:52:18 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/1 * DNIS:8729306 * CSID:12489888363 * DURATION (mm-ss):02-22

12. (ORIGINAL) The propeller control system as recited in claim 1, wherein said propeller shaft is rigidly mounted through a gear reduction gearbox.

13. (ORIGINAL) A method of cyclically controlling a pitch of a plurality of rigidly mounted propeller blades comprising the steps of:

(1) translating a first pitch change yoke portion and a second pitch change yoke portion mounted within a propeller shaft along an axis of rotation to collectively change a pitch of said plurality of propeller blades; and

(2) articulating the second pitch change yoke portion off said axis of rotation relative the first pitch change yoke portion to cyclically change the pitch of said plurality of propeller blades.

14. (ORIGINAL) A method as recited in claim 13, further comprising the step of: rotating the first and second pitch change yoke portion with the propeller shaft.

15. (ORIGINAL) A method as recited in claim 13, further comprising the step of: linearly actuating a pitch change actuator to deflect said second pitch change yoke portion from said axis of rotation.

16. (ORIGINAL) A method as recited in claim 15, further comprising the step of: pivotally mounting the pitch change actuator perpendicular to the second pitch change yoke portion.

17. (ORIGINAL) A method as recited in claim 13, further comprising the step of: mounting a first pitch change actuator and a second pitch change actuator perpendicular to the second pitch change yoke portion, the first pitch change actuator radially separated from the second pitch change actuator by 90 degrees.

18. (ORIGINAL) A method as recited in claim 17, further comprising the step of:

mounting the first pitch change actuator and the second pitch change actuator adjacent a gear reduction gearbox.

19. (ORIGINAL) A method as recited in claim 13, further comprising the step of:

controlling said step (2) in response to an aircraft flight control system.

20. (CURRENTLY AMENDED) A flight control method for an aircraft comprising a propeller system having a plurality of rigidly mounted propeller blades, said method comprising the steps of:

~~(1)~~ mounting the propeller system to an aircraft wing such that the plurality of rigidly mounted propeller blades of the propeller system rotate generally within a plane defined generally transverse of an aircraft wing;

~~(1)~~(2) collectively changing a pitch of the plurality of rigidly mounted propeller blades of the propeller system to generate a trust; and

~~(2)~~(3) cyclically changing the pitch of the plurality of propeller blades to generate a moment.

21. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the step of:

controlling the moment of said step ~~(2)~~ (3) from at least two propeller systems to control aircraft movement about an axis.

22. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the step of:

controlling the moment of said step ~~(2)~~ (3) from at least two propeller systems mounted to the aircraft wing to generate a bending moment about an aircraft axis.

23. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the step of:

controlling the combination of the thrust of said step ~~(1)~~ (2) with the moment of said step ~~(2)~~ (3) to generate a bending moment about an aircraft axis.

24. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the step of:

controlling the combination of the thrust of said step ~~(1)~~ (2) with the moment of said step ~~(2)~~ (3) for at least two of the propeller systems to generate a bending moment about an aircraft axis.

25. (NEW) A method as recited in claim 20, wherein the trust of said step (2) is directed generally parallel to a chord of the aircraft wing.

26. (NEW) A method as recited in claim 20, wherein the trust of said step (2) is an aircraft forward thrust.

27. (NEW) A method as recited in claim 20, wherein the trust of said step (2) is directed generally parallel to an aircraft X-axis.



PAGE 6/8 * RCVD AT 4/7/2005 1:52:18 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/1 * DNIS:8729306 * CSID:12489888363 * DURATION (mm-ss):02-22